ILLEGIB

[redacted]

April 1972

With this first edition, we hope to inaugurate a short newsletter, including points of importance as regards the Executive Annual Physical Program: health, physical fitness, and general well-being. Editions will come out every two months.

In the future, we hope to have short articles on points of importance for the health of our executives. There will be a section including facts of general medical interest. Finally, we hope to inaugurate a question and answer section.

Annual Physical Examination.

It might be of interest to review what is done in our current executive annual physical examination. Currently, our examinations are done in three stages, and often because of additional studies, will include extra stages.

The first stage consists of laboratory screening, which includes visual examination for near and distant vision, a hearing test which measures hearing changes in the speech frequencies, and a tonometric examination which is done to detect early stages of glaucoma (increased pressure within the eye than can be asymptomatic but can lead to visual loss).

The laboratory studies include a complete urinalysis in which the urine is examined for albumin, sugar, and microscopically for the presence of cells and bacteria. Blood studies are done and include hematocrit, which will detect anemia, a blood test of thyroid function, and then 12 determinations on our SMA 12/60 Autoanalyser. These latter determinations are done automatically and results are printed out on a graph form as well as directly typed out. On the next page you will see an example of the type reading the physician receives.

The various measurements done on the blood include:

1. Calcium and phosphorus which reflect bone metabolism.

2. Glucose, the determination of blood sugar which will detect diabetes and early stages of diabetes.

3. BUN (blood urea nitrogen) which is a test of kidney function.

4. Uric acid, which gives a reading on the possibility of gout and may also be altered by certain medicines.

5. Cholesterol readings, which parallel possible arteriosclerosis.

6. Total protein and albumin which reflect the general well-being of the body and detect diseases of the liver and bone marrow.

7. Bilirubin, a reflection of bile pigments in blood which may detect alterations in liver function and also abnormalities in which blood corpuscles are being destroyed too rapidly.

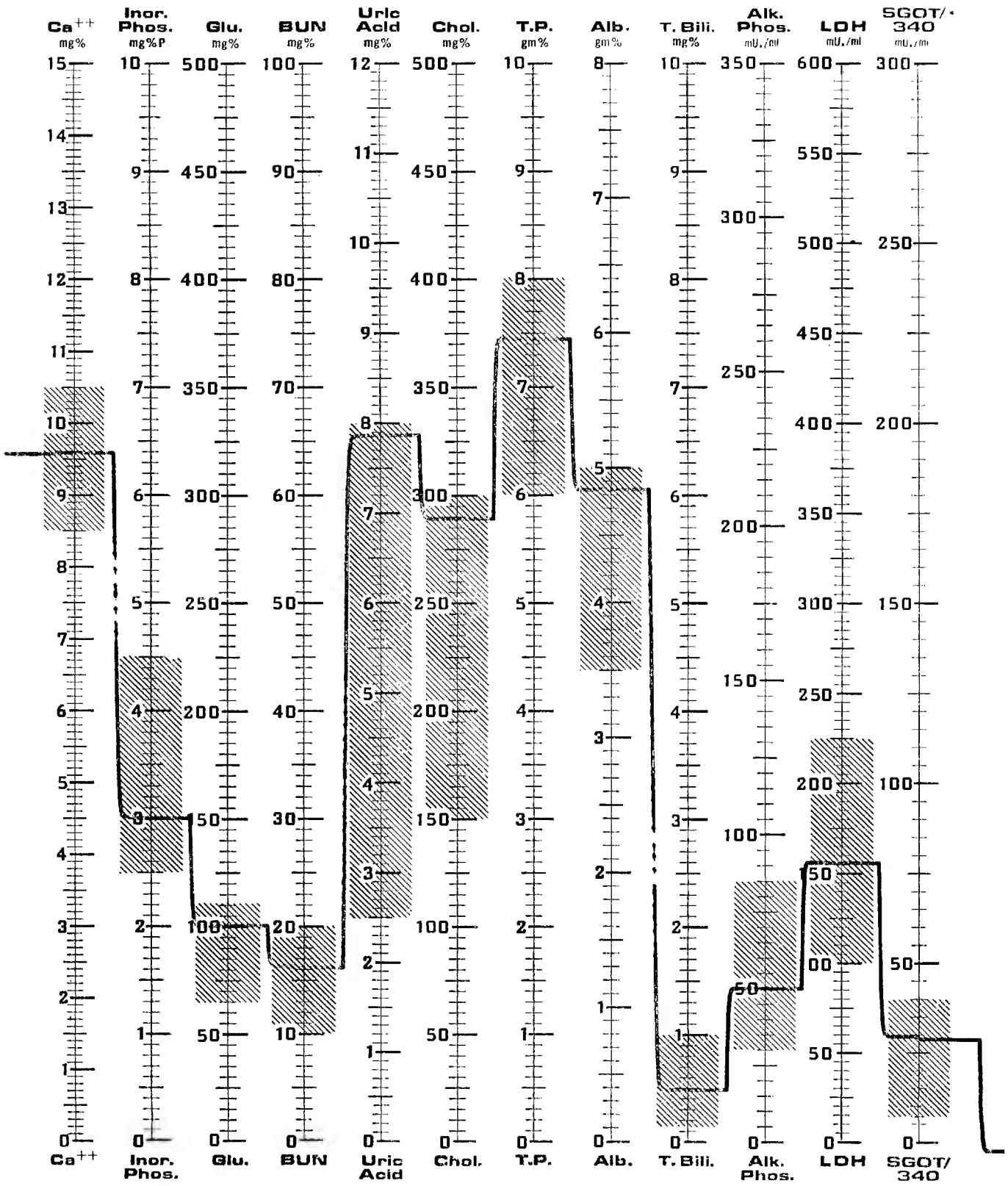

Figure 1. Autoanalyser graph

8. Alkaline phosphatase, enzyme which may be altered by changes in bone metabolism and liver disease.

9. LDH and SGOT, enzymes which may reflect heart disease, liver disease.

Following the physical examination, the laboratory studies are available for the physician to review; in addition, a chest X-ray has been done and an electrocardiogram has been taken which is now being interpreted by computer.

HEALTH TOPICS

Factors Favoring Development of Coronary Artery Disease.

The risk factors favoring the development of coronary artery disease are recognized to be hypertension (high blood pressure), smoking, obesity, increased blood lipids (cholesterol and triglycerides), lack of exercise, elevated blood levels of uric acid, diabetes mellitis, and a family history of coronary artery disease. In all cases except the family history, these risk factors can be reversed or reduced through medical therapy, self-discipline, and changes in habits. Recognition of these risk factors is obvious in some cases and requires medical and laboratory examinations in others. An awareness of these factors and vigorous attempts to reverse them are strongly recommended. Discussions of these risks and other related problems will appear in future newsletters.

Impact of Heart Disease in the United States.

Coronary artery disease affects over 20 million people in the United States. Each year, more than 600,000 persons die from myocardial infarction, or "heart attack." More than half of these persons die before reaching medical care. The total cost of illness exceeds ten billion dollars each year. Over 50 million man-days of production are lost each year because of coronary atherosclerotic heart disease. Gradually progressive, supervised physical activity programs following heart attacks have been instituted in 1,500 patients at Grady Memorial Hospital in Atlanta, Georgia, and have allowed a more rapid return to normal living. Early ambulation has been helpful both psychologically and physiologically in most. It has been estimated that if the duration of hospitalization for each patient with a heart attack could be *safely* decreased by just one day, in the course of a year, it would reduce the cost of medical care in this country by 400 million dollars.

Alcohol May Be Harmful to the Cardiac Patient.

A Fordham Hospital group in New York has found that ten heart patients pumped less blood one-half hour after drinking two ounces of 86 proof whiskey compared to pre-drinking levels. Four *non*-cardiac patients pumped *more* blood after alcohol. At Mount Sinai Medical School, muscle deterioration, possibly in the heart also, occurred in three non-alcoholics given a fifth of 86 proof whiskey every day for four weeks. Normalcy was returned on cessation of drinking. It is concluded that in the presence of heart disease, the drinking of alcohol may be hazardous.

The Surgeon General's Report on the Effects of Smoking on Non-Smokers.

The United States Surgeon General's new report on cigarette smoking reinforces evidence of tobacco links to lung cancer, unsuccessful pregnancy, and coronary heart disease. It also describes the plight of the non-smoker surrounded by tobacco smoke. The burning of a fair amount of tobacco in a confined space can clearly push the carbon monoxide concentration to and over the threshold limits set by Federal law for occupational exposure. There is some risk, for example, for a non-smoker driving in a car full of smokers. The levels of carbon monoxide exposures are not too different from those that have been associated with "altered hearing, visual acuity loss, and a loss of ability to distinguish brightness." At carbon monoxide levels similar to those at an average party, heart disease patients show symptoms of heart muscle oxygen lack. It is clear that the smoker may place at risk not only himself but also those around him.

Saccharin Danger Versus Safety.

The FDA has removed saccharin from the so-called GRAS (generally recognized as safe) list and has set the safe average adult intake at one gram per day. This amount is the equivalent of about seven 12 ounce bottles of diet soft drink. The 20 test rats which were studied and which influenced that decision received a diet of 5% saccharin for two years. For man, that would equal 875 bottles of diet cola a day. Three of the 20 rats studied had signs of bladder tumor at the end of the experiment; whether the tumors were cancerous or not has not yet been determined.

ROUTING AND RECORD SHEET

SUBJECT: (Optional)

Efforts in the Prevention of Coronary Artery Disease

FROM:	EXTENSION	NO.
Director of Medical Services Room 1D4061 Headquarters	7711	
		DATE 16 JUN 1972

TO: (Officer designation, room number, and building)	DATE RECEIVED	DATE FORWARDED	OFFICER'S INITIALS	COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)
1. Deputy Director for Support Room 7D26 Headquarters		23 JUN 1972		1 - 3:
2.				Returned per our telecon. I believe it essential that we have a revised paper for the Director by 27 June 1972.
3. Acting Director of Medical Services 1D4061 HQS	23 JUN 1972			John W. Coffey
4.				Att: Memo dtd 16 June 72 for DD/S fr D/MS, subj: Efforts in the Prevention of Coronary Artery Disease
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				